

ABSTRACT

A MEMs mirror device comprises a mirror layer, a frame structure, and an actuator layer. At least one mirror is movably coupled to the frame. The actuator layer includes at least one conductive path for moving the mirror. In accordance with the invention, the mirror is curved for efficiently directing and focusing reflected light. The mirror comprises a metal-coated base, and curvature can be achieved by doping selected regions of the base or by using coating/base combinations with sufficient mismatch that they be curved by differential thermal expansion. The resulting MEMs devices are advantageous for optical switching, variable attenuation and power gain equalization.